

## LAMPREY TECHNICAL REVIEW COMMITTEE

## NH Instream Flow Pilot Program

New Hampshire Department of Environmental Services PO Box 95 - 29 Hazen Drive - Concord, NH 03302-0095 Phone: 603-271-3548 Fax: 603-271-7894 Email: wayne.ives@des.nh.gov



Lamprey TRC Meeting Minutes
Friday, June 9, 2008
1:00 pm – 4:00 pm
Fish and Game Conference Room
Hazen Drive
Concord, NH

Members Present: Representing

Brian Gallagher Business Interests, NH Water Works Association

Vernon Lang US Fish and Wildlife Service

John Magee NH Fish & Game

Doug Bechtel The Nature Conservancy

Ralph Abele US EPA Robert Flynn USGS

Others Present Affiliation

Therese Thompson Pawtuckaway Lake Association - Lamprey WMPAAC

Mike Kappler NH legislature (SB330) Piotr Parasiewicz NEIHP – UMASS

Al Larson Normandeau Associates

David Cedarholm Town of Durham – Lamprey WMPAAC

Lee Carbonneau Normandeau Associates

Dan Tinkham Emery and Garrett Groundwater

Sean Grieg Town of Newmarket W. F. Hall Lamprey River LAC

Mitch Kalter Fish and Game Commission

## **DES Staff Present:**

Wayne Ives, Instream Flow Specialist, Watershed Management Bureau Kathie Fife, Instream Flow Environmentalist, Watershed Management Bureau Steve Couture, Rivers Coordinator, Watershed Management Bureau

The previous meeting's minutes were put off until next meeting.

Wayne Ives began the presentation with a discussion of the Natural Flow Paradigm (Poff et al. 1997) and the Instream Flow Program process.

Al Larson continued by describing the hydrologic record and the assessment of historical conditions under the proposed PISFs based on selected parts of the hydrograph (30 year record corrected for withdrawals, three year records representing high flow, low flow and average flow years, and the previous five years.)

Lee Carbonneau described the Floodplain Transect Method including the species, method, cross sections and bioperiods used to identify the protected flows for riparian vegetation and wildlife.

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Dave Cedarholm questioned the timing and effects of dewatering the impoundment behind Wiswall dam to affect repairs. Al Larson discussed the need to moderate the rate of change during the draining to allow fauna to move with the receding water.

Rob Flynn asked why the \_\_ wasn't closer to the mean stream flow (300 cfs).

Piotr Parasiewicz described the fish habitat model and results. Nothing alarming was found relative to the temperature regime. The MesoHABSIM process includes adjusting the biophysical template. Ralph Abele asked when the community and generic habitat curves are constructed.

Brian Giles asked how close the comparison between the existing and target fish communities. Piotr said the existing is not much different from the target community. There are too many RB sunfish. Piotr then described the suitability models showing the presence and abundance of fish as first present or absent. And then for those present, whether the habitat supported suitable or optimal conditions. The effective habitat is a representation of the weighted values of optimal and suitable habitats. The effective habitat data are presented as generic fish habitat and community fish habitat curves.

The habitat was after establishing baseline geomorphic structures simulated by removing or altering the impacts of the two dams. The development of UCUT curves and the identification of inflection points and curve distribution variations were discussed.

Therese Thompson asked about "alewife spawning in lakes" language in the report and the need for increased connectivity in the river (possible dam removal?).

Vern Lang asked whether flow analysis was done for the pond species in the TFC as well as for the fluvial species. Piotr said analysis was done for the RB sunfish (high in the TFC list), but not for the generic pond species. Vern also discussed the character of the Lamprey River as not representing whitewater recreational flows such that the proposed boating flows do not represent flows needed to meet whitewater conditions. He asked Lee C. to explain the reasoning behind selecting the flow levels needed to protect wood turtle hibernation.

Al Larson explained the reason for not proposing protected flows for public water supply use and further that described the 1965 state statute regarding Durham and other towns' use of the Lamprey, and the withdrawal of Lamprey water going to the Oyster watershed.

Bill Hall had comments about the public water supply use of the river and questioned the concept of surcharging the Spruce Hole bog. It was noted that Newmarket currently surcharges their wells. Therese Thompson cited the USGS report concerning water availability on the seacoast.

Dave Cedarholm had comments regarding Newmarket's withdrawal.

Wayne Ives discussed the schedule for the public hearing once the report was finalized and approved by the TRC.

Meeting adjourned.